



Swenson Say Fagét
STRUCTURAL ENGINEERING

2124 Third Ave, Suite 100
Seattle, WA 98121
☎ 206.443.6212

934 Broadway, Suite 100
Tacoma, WA 98402
☎ 253.284.9470

⊕ ssfengineers.com

August 14, 2020

Matt Aalfs
BuildingWork
159 Western Avenue West, Suite 486
Seattle, WA 98119

Re: Responses to November 16, 2016 Review Comments
Building Permit # 6508387
423 2nd Ave Ext S
Seattle, WA 98104

Following are our written responses to the November 16, 2016 structural review comments for the Metropole Building from the City of Seattle.

Structural

4. SEBC 304.4.2 - Please provide structural general notes to clarify the design criteria for the seismic upgrade. It appears the design is per item [1, 2, 3 or 4] of SEBC 304.4.2. Suggested text for notes is as follows: The building was evaluated in accordance with ASCE 31-03 and retrofitted per ASCE 41-06 for the life safety performance level using the BSE-1 earthquake hazard level. See the engineer's report in accordance with DR7-2009, dated xxx. [Reference the structural engineers report for deficiencies not addressed within the scope of this project.] New building elements are designed in accordance with the 2012 SBC.

Response: General structural note 1 has been updated to clearly identify the compliance method used. The retrofit has been designed to conform with SEBC 304.4.2 method 4.

5. ASCE 7-10 section 12.2-1 B 3 references footnote J for SDC D. The OCBF is not allowed for this application, as the building is not a one story building. Please revise design accordingly. You may consider a SCBF system of alternate materials, per AISC 341. Also, revise structural general notes on sheet S1.00 include design criteria for the special concentric braced frames.

Response: The retrofit was designed per ASCE 41-06 which does not have the above listed limitations on OCBF or OMF seismic force resisting systems. It is not feasible to design Special Moment Frame systems for existing URM structures such as the Metropole. However, while not required by ASCE 41-06, the frames at Metropole were detailed and frame sections were selected to comply with SMF criteria.

Please call if you have any questions regarding the above information.

Sincerely,

Francesca Renouard

Francesca Renouard, PE

Project Manager

frenouard@ssfengineers.com



**SEATTLE
TACOMA**

2124 Third Ave, Suite 100, Seattle, WA 98121
934 Broadway, Suite 100, Tacoma, WA 98402

○ 206.443.6212
○ 253.284.9470

⊕ ssfengineers.com